LISTING OF CLAIMS:

The present listing of claims replaces all prior listings or versions of claims in the present application.

Claims 1-13 have been cancelled.

14. (NEW) A master alloy for casting a copper alloy, comprising:

Cu: 40 to 80 wt.%;

Zr: 0.5 to 35 wt.%; and

the balance of Zn.

15. (NEW) The master alloy for casting a copper alloy, according to claim 14, further comprising:

P: 0.01 to 3 wt.%.

16. (NEW) The master alloy for casting a copper alloy according to claim 14, further comprising:

one element selected from the group consisting of Mg: 0.01 to 1 wt.%, Al: 0.01 to 5 wt.%, Sn: 0.1 to 5 wt.%, B: 0.01 to 0.5 wt.%, Mn: 0.01 to 5 wt.% and Si: 0.01 to 1 wt.%.

17. (NEW) The master alloy for casting a copper alloy according to claim 14,

wherein said Cu occupies 50 to 65 wt.%, and said Zr occupies 1 to 10 wt.%.

18. (NEW) The master alloy for casting a copper alloy according to claim 14,

wherein said master alloy is an ingot formed in a shape of a boat, continuous casting

material formed in a shape of a rod or wire, or hot extrusion material formed in a shape of a rod or wire.

19. (NEW) A master alloy for casting a copper alloy, comprising:

Cu: 40 to 80 wt.%;

Zr: 0.5 to 35 wt.%;

P: 0.01 to 3 wt.%; and

the balance of Zn.

20. (NEW) The master alloy for casting a copper alloy according to claim 19, further comprising:

one element selected from the group consisting of Mg: 0.01 to 1 wt.%, Al: 0.01 to 5 wt.%, Sn: 0.1 to 5 wt.%, B: 0.01 to 0.5 wt.%, Mn: 0.01 to 5 wt.% and Si: 0.01 to 1 wt.%.

21. (NEW) The master alloy for casting a copper alloy according to claim 19,

wherein said Cu occupies 50 to 65 wt.%, and said Zr occupies 1 to 10 wt.%.

22. (NEW) The master alloy for casting a copper alloy according to claim 19,

wherein said master alloy is an ingot formed in a shape of a boat, continuous casting material formed in a shape of a rod or wire, or hot extrusion material formed in a shape of a rod or wire.

23. (NEW) A method of casting a modified copper alloy from a molten copper alloy containing Zr and P, the method comprising the steps of:

providing a molten copper alloy;

adding at least Zr in the form of Cu–Zn–Zr alloy or Cu–Zn–Zr–P alloy into said molten copper alloy;

and casting said molten copper alloy.

24. (NEW) The method of casting a modified copper alloy from a molten copper alloy containing Zr and P according to claim 23,

wherein Zr is added in the form of Cu–Zn–Zr–P alloy and concentration of the metal Zr in the molten alloy is in a range of 5 ppm or more in the presence of P when the molten copper alloy begins to solidify.

25. (NEW) The method of casting a modified copper alloy from a molten copper alloy containing Zr and P according to claim 24,

wherein concentration of the metal Zr in the molten alloy is in a range of 20 to 500 ppm in the presence of P when the molten copper alloy begins to solidify.

26. (NEW) The method of casting a modified copper alloy from a molten copper alloy containing Zr and P according to claim 24,

wherein an amount ratio of P to Zr in said molten copper alloy satisfies $0.5 < P/Zr < 150$.

27. (NEW) The method of casting a modified copper alloy from a molten copper alloy containing Zr and P according to claim 26,

wherein the amount ratio of P to Zr in said molten copper alloy satisfies $1 < P/Zr < 50$.

28. (NEW) The method of casting a modified copper alloy from a molten copper alloy

containing Zr and P according to claim 27,

wherein the amount ratio of P to Zr in said molten copper alloy satisfies $1.2 < P/Zr < 25$.

29. (NEW) The method of casting a modified copper alloy from a molten copper alloy containing Zr and P according to claim 24,

wherein primary alpha phases begin to be crystallized during solidification.

30. (NEW) The method of casting a modified copper alloy from a molten copper alloy containing Zr and P according to claim 29,

wherein beta phases are crystallized by peritectic or eutectic reactions.

31. (NEW) The method of casting a modified copper alloy from a molten copper alloy containing Zr and P according to claim 29,

wherein one or more phases selected from the group consisting of kappa, gamma, delta and mu phases are precipitated in an alpha phase matrix by a solid phase reaction.

32. (NEW) The method of casting a modified copper alloy from a molten copper alloy containing Zr and P according to claim 23,

wherein a copper alloy to be modified is one selected from the group consisting of Cu – Zn, Cu – Zn – Si, Cu – Zn – Sn, Cu – Zn – Al, Cu – Zn – Bi, Cu – Zn – Pb, Cu – Zn – Si – Mn, Cu – Zn – Si – Pb, Cu – Zn – Si – Sn, Cu – Zn – Si – Al, Cu – Zn – Sn – Pb, Cu – Zn – Sn – Bi, Cu – Zn – Sn - Al, Cu - Sn, Cu – Sn - Pb, Cu – Sn – Bi, Cu – Al, Cu – Al – Si, Cu – Si, Cu – Cr, Cu – Pb, Cu – P, and Cu - Te.

33. (NEW) The method of casting a modified copper alloy from a molten copper alloy containing Zr and P according to claim 32,

wherein said copper alloy to be modified satisfies $60 < Cu - 3.5Si - 1.8Al - 0.5X + 0.5Y + Mn < 90$ where X is Sn, Sb, As or Mg and Y is Pb, Bi, Se, Te or Cr.